CLAIMS

I claim:

1.   A method for using a hardware I/O control
5   block array by a parallel SCSI host adapter, said
method comprising:
partitioning said hardware I/O control block
array for said parallel SCSI host adapter into
first and second pages;
10   using only said first page for non-Packetized
SCSI Protocol hardware I/O control block storage;
and
using said first and second pages for
Packetized SCSI Protocol hardware I/O control
15   block storage.

2.   The method of Claim 1 wherein using said first
and second pages for Packetized SCSI Protocol hardware
I/O control block storage further comprises:
20   using said first page only when all available
storage sites on said second page are used.

3.   The method of Claim 1 further comprising:
maintaining a first page free site queue
25   for said first page by a driver for said
parallel SCSI host adapter.

4.   The method of Claim 3 further comprising:
maintaining a second page free site
30   queue for said second page by said driver for
said parallel SCSI host adapter.

5.   The method of Claim 1 further comprising:
maintaining a second page free site
35   queue for said second page by a driver for
said parallel SCSI host adapter.

-13-

6. The method of Claim 1 further comprising:

        using a hardware I/O control block array
    pointer having a low byte and a high byte to
    address a storage site in said hardware I/O
5   control block array.

7. The method of Claim 6 further comprising:
        loading a tag from a reconnecting target into
said low byte only.
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8. The method of Claim 7 further comprising:
        loading said high byte with a zero value.

9. The method of Claim 6 further comprising:
15   loading a tag from a reconnecting target into
said low byte and said high byte.

10. A system comprising:
        a parallel SCSI host adapter comprising;
20   a sequencer; and
            a hardware I/O control block array
        pointer, coupled to said sequencer, having a
        low byte and a high byte; and
        a memory, coupled to said hardware I/O
25 control block array pointer, including a hardware
    I/O control block array comprising:
                a plurality of pages including a first
            page and a second page,
                    wherein said first page includes a
30   plurality of hardware I/O control block
                storage sites equal to a number of
                unique tag values that can be returned
                by a non-Packetized SCSI Protocol tagged
                queue target reconnecting to said
35   parallel SCSI host adapter; and

-14-

said second page includes another
plurality of hardware I/O control block
storage sites.

5   11.   The system of Claim 10 wherein said memory is
external to said parallel SCSI host adapter.

12..   The system of Claim 10 wherein said memory is
internal to said parallel SCSI host adapter.

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13. The system of Claim 10 further comprising:
a driver coupled to said parallel SCSI host
adapter, wherein said driver allocates and de-
allocates storage sites in said hardware I/O

15   control block array.

14.   The system of Claim 13 wherein said driver
allocates sites for non-Packetized SCSI hardware I/O
control blocks only in said first page.

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15.   The system of Claim 13 wherein said driver
allocates sites for Packetized SCSI hardware I/O
control blocks in said first page and in said second
page.

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16.   The system of Claim 15 wherein said driver
allocates sites for Packetized SCSI hardware I/O
control blocks in said first page only when all
available sites in said second page are used.

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17.   The system of Claim 13 further comprising:
a first page free site queue coupled to
said driver.

35   18.   The system of Claim 17 further comprising:

a second page free site queue coupled to said driver.

19.   The system of Claim 13 further comprising:
5   a second page free site queue coupled to said driver.

20.   A method for using a hardware I/O control block array by a parallel SCSI host adapter, said
10   method comprising:
              partitioning said hardware I/O control block array for said parallel SCSI host adapter into first and second pages; and
              using only said first page for non-Packetized
15   SCSI Protocol hardware I/O control block storage;
              using said first and second pages for Packetized SCSI Protocol hardware I/O control block storage;
              maintaining a first page free site queue for
20   said first page by a driver for said parallel SCSI host adapter;
              maintaining a second page free site queue for said second page by said driver for said parallel SCSI host adapter;
25   using a hardware I/O control block array pointer having a low byte and a high byte to address a storage site in said hardware I/O control block array; and
              loading a tag from a reconnecting target into
30   said hardware I/O control block array pointer.